

What is claimed is:

1. A book-marking system on user's part for book-marking a particular location in a virtual space under the control of a server providing the virtual space on a network, comprising:

means for requesting to the server information required for book-marking through the network, when the user requests to book-mark for the particular location; wherein the information includes data for identifying the virtual space; data for indicating the particular location within the virtual space; and data on static objects except dynamic objects which vary with time within a predetermined distance from the particular location; and

means for storing the information when the information is received from the server so as to provide the information to the user when the user requests later.

2. The book-marking system on user's part of Claim 1, further comprising means for visually displaying the data on static objects to the user.

3. The book-marking system on user's part of Claim 2, wherein the means for displaying the data on static objects includes:

means for interpreting the data on static objects; and

means for converting the interpreted data on static objects to an image format, and displaying the image format data on a monitor of the user.

4. A book-marking system mounted to a server providing a virtual space on a network, for supporting a user to book-mark a particular location in the virtual space, comprising:

a first storage means for storing data of the user;

a second storage means for storing data of the virtual space; and

means for creating information of book-marking and transmitting the book-marking information to the user, after recognizing the particular location in the virtual space by using the user data and the virtual space data stored in the first and second storage means, when the user requests the information of book-marking the particular location,

wherein the book-marking information includes data for identifying the virtual space; data for indicating the particular location within the virtual space; and data on

static objects except dynamic objects which vary with time within a predetermined distance from the particular location.

5 5. The book-marking system on server's part of Claim 4, further comprising means for return-supporting for the user to return to the particular location corresponding to the book-marking information; wherein the return-supporting means includes:

10 means for extracting location information indicating the particular location by receiving the book-marking information from the user and interpreting the data for identifying the virtual space as well as the data for indicating the particular location within the virtual space; and

15 means for moving the user to the particular location by the use of the extracted location information.

20 6. The book-marking system on server's part of Claim 5, wherein the moving means transmits data having both information of the dynamic objects and information of the static objects to the user.

25 7. The book-marking system on server's part of Claim 5, further comprising a multicasting means for providing information related to the moving of the user to devices requiring the information related to the moving of the user, when the user moves to the particular location.

30 8. The book-marking system on server's part of Claim 7, wherein the devices requiring the information related to the moving of the user are used to manage the objects within a predetermined distance from the particular location in the virtual space.

35 9. The system on server's part of Claim 4, wherein the means for creating the information of book-marking includes:

40 means for extracting information for identifying the user from the first storage means;

means for extracting the data for identifying the virtual space and the data for indicating the particular location within the virtual space from the second storage means, based on the information for identifying the user;

45 means for extracting the data of the static objects from the second storage means, based on the data for identifying the virtual space and the data for indicating the particular location; and

means for creating the book-marking information by combining the data for identifying the virtual space, the data for indicating the particular location, and the data of the static objects.

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10. A book-marking system to support a user to book-mark a particular location in a virtual space under the control of a server providing the virtual space on a network, comprising:

10 associated to user's part, means for requesting to the server information required for book-marking through the network, when the user requests to book-mark for the particular location; wherein the information includes data for identifying the virtual space; data for indicating the particular location within the virtual space; and data on static objects except dynamic objects which vary with time within a predetermined distance from the particular location;

15 associated to the server, a first storage means for storing data on the user;

20 associated to the server, a second storage means for storing data on the virtual space;

25 associated to the server, means for creating information of book-marking and transmitting the book-marking information to the user, after recognizing a particular location in the virtual space by using the user data and the virtual space data stored in the first and second storage means, when the user requests the information of book-marking the particular location; and

30 associated to user's part, means for storing the information when the information is received from the server so as to provide the information to the user when the user requests later.

35 11. A book-marking method on user's part for book-marking a particular location in a virtual space under the control of a server providing the virtual space on a network, comprising the steps of:

40 requesting to the server information required for book-marking through the network, when the user requests to book-mark the particular location, wherein the information includes data for identifying the virtual space; data for indicating the particular location within the virtual space; and data on static objects except dynamic objects which vary with time within a predetermined distance from the particular location; and

45 storing the information, when the information is received from the server so as to provide the information

to the user when the user requests later.

12. The book-marking method on user's part of Claim 11, further comprising the step of visually displaying the data on static objects to the user.

13. The book-marking method on user's part of Claim 12, wherein the step of displaying includes the steps of:
interpreting the data on static objects; and
converting the interpreted data of the static objects to an image format, and displaying the interpreted data on a monitor of the user.

14. A book-marking method on server's part to support a user to book-mark a particular location in a virtual space, comprising the steps of:

storing data on the user;
storing data on the virtual space; and
creating information of book-marking and transmitting the book-marking information to the user, after recognizing the particular location in the virtual space by using the user data and the virtual space data, when the user requests the information of book-marking the particular location,
wherein the book-marking information includes data for identifying the virtual space; data for indicating the particular location within the virtual space; and data on static objects except dynamic objects which vary with time within a predetermined distance from the particular location.

15. The book-marking method on server's part of Claim 14, further comprising the step of return-supporting for the user to return to the particular location corresponding to the book-marking information; wherein the return-supporting step includes the steps of:

extracting location information indicating the particular location by receiving the book-marking information from the user and interpreting the data for identifying the virtual space as well as the data for indicating the particular location within the virtual space; and
moving the user to the particular location by the use of the extracted location information.

16. The book-marking method on server's part of Claim 15, wherein the moving step transmits data having both information of the dynamic objects and information of the

static objects to the user.

17. The book-marking method on server's part of Claim 15, further comprising the step of multicasting information related to the moving of the user to devices requiring the information related to the moving of the user, when the user moves to the particular location.

18. The book-marking method on server's part of Claim 14, wherein the step for creating the information of book-marking includes the steps of:

- extracting information for identifying the user from the user data;

- extracting the data for identifying the virtual space and the data for indicating the particular location within the virtual space from the virtual space data, based on the information for identifying the user;

- extracting the data of the static objects, based on the data for identifying the virtual space and the data for indicating the

- creating the book-marking information by combining the data for identifying the virtual space, the data for indicating the particular location, and the data of the static objects.

19. A book-marking method to support a user to book-mark a particular location in a virtual space under the control of a server providing the virtual space on a network, comprising the steps of:

- on user's part, requesting to the server information required for book-marking through the network, when the user requests to book-mark for the particular location; wherein the information includes data for identifying the virtual space; data for indicating the particular location within the virtual space; and data on static objects except dynamic objects which vary with time within a predetermined distance from the particular location;

- on server's part, storing data on the user;

- on server's part, storing data on the virtual space;

- on server's part, creating information of book-marking and transmitting the book-marking information to the user, after recognizing a particular location in the virtual space by using the user data and the virtual space data, when the user requests the information of book-marking the particular location; and

- on user's part, storing the book-marking information when the information is received from the server so as to provide the information to the user when the user requests

later.

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